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PATENT APPLICATION: US/09/769,736

DATE: 02/24/2003

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3 <110> APPLICANT: Microbial Technics Limited
 4 Le Page, Richard WF
 5 Wells, Jeremy M
 6 Hanniffy, Sean B
 8 <120> TITLE OF INVENTION: Proteins
 10 <130> FILE REFERENCE: PWC/P21089wo
 C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/769,736
 C--> 13 <141> CURRENT FILING DATE: 2003-02-14
 15 <150> PRIOR APPLICATION NUMBER: GB 9816335.5
 16 <151> PRIOR FILING DATE: 1998-07-27
 18 <150> PRIOR APPLICATION NUMBER: US 60/125163
 19 <151> PRIOR FILING DATE: 1999-03-19
 21 <160> NUMBER OF SEQ ID NOS: 212
 23 <170> SOFTWARE: PatentIn Ver. 2.1
 25 <210> SEQ ID NO: 1
 26 <211> LENGTH: 1248
 27 <212> TYPE: DNA
 28 <213> ORGANISM: Streptococcus agalactiae
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 55 <211> LENGTH: 415
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<110> Microbial Technics Limited

Le Page, Richard WF

Wells, Jeremy M

Hanniffy, Sean B

Hansbro, Philip M

<120> Proteins

<130> PWC/P21122WO

<140> PCT/GB99/02452

<141> 1999-07-27

<150> GB 9816336.3

<151> 1998-07-27

<150> US 60/125329

<151> 1999-03-19

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gtagcagaag gactgaagaa tgtaaatggt gttaacttcg actataaaga cgaagcaagt 240
gccaaagaag caattaaaga agaaaaatta aaagggttatt tgaccattga tcaagaagat 300
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00769736-012601



<212> PRT

<213> Streptococcus pneumoniae

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1 **5** **10**

[illegible]

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Results of Southern blot analysis

All genomic digests and their corresponding Southern blots followed an identical lane order as described in Table I.

5 Table I

1 kb molecular Weight Marker	515	A909	SB35	H36B	18RS21	1954/92
	Ia	Ia	Ib	Ib	II	II

118/158	97/0057	BM110	BS30	M781	97/0099	3139
II	II	III	III	III	III	IV

1169-NT	GBS 6	7271	JM9	Group A Streptococcus	<i>Streptococcus pneumoniae</i>
V	VI	VII	VIII	-	14

- 10 For comparative purposes, it was decided to analyse the serotype distribution of the GBS *rib* gene, which encodes the known protective immunogen Rib. Rib has previously been shown to be present in serotype III and some strains of serotype II but not in serotypes Ia or Ib (Stalhammar-Carlemalm *et al.*, 1993). Confirmation of this pattern would not only give increased confidence in interpreting subsequent results, it would also determine if a *rib* gene homologue was present in the remaining GBS

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